

A MESSAGE FROM THE SUPERINTENDENT

Congratulations on selecting Canaveral National Seashore as one of your education destinations for the school year 2016/17. In this teacher's guide you will find instructions on how to make the most of our Environmental and Cultural Education Program. Please follow these instructions to ensure an enjoyable and fulfilling seashore experience.

Contact the Interpretive Park Ranger Michell Woulard for Apollo Beach at (386)428-3384 ext. 240 and Interpretive Park Ranger Ashley Steele for Playalinda Beach at (321)403-9334. Please schedule before filling out a fee waiver to ensure the dates are available.

Enclosed is a sample letter of a fee waiver request that must be submitted by each school. Please allow two weeks between the time of your visit and the point at which you send your fee waiver request. This will ensure that we can process and send the proper document to you in time. Once you have received the fee waiver please remember to bring it with you to the park on the day of your program.

To attain a better understanding of the program you will be attending and gain the most from your time at Canaveral National Seashore, we encourage you to review these materials with your students. If more than one trip is scheduled please share all of this information with the other teachers.

With your assistance, we anticipate that your students will enhance their classroom activities with their park experience. Your participation and the preparation of your class are essential to the student's safety, learning experience and the success of this program.

Thank you for your interest in Canaveral National Seashore and our Environmental and Cultural Education Program. Have a safe and educational National Park experience.

Superintendent



MISSION STATEMENTS

THE NATIONAL PARK SERVICE

The mission of the National Park Service is to promote and regulate the use of federal areas known as National Parks. We conserve the scenery and the natural and historic objects and wildlife within. We provide for the enjoyment of them in such a manner as will leave them unimpaired for the enjoyment of future generations.

CANAVERAL NATIONAL SEASHORE

Canaveral National Seashore is administered by the U.S. Department of the Interior, National Park Service. It is one of over 400 National Parks and one of 10 National Seashores in the United States.

Canaveral National Seashore was established in 1975, “to preserve and protect the outstanding natural, scenic, scientific, ecologic, and historic values of certain lands, shorelines, and waters of the State of Florida, and to provide for the public outdoor recreation use and enjoyment of the same...”

YOUR EDUCATIONAL TRIP TO CANAVERAL NATIONAL SEASHORE

This Environmental and Cultural Education Program at Canaveral National Seashore will introduce 4th and 5th grade students to its fragile and varied environments. What they will see and experience will help them appreciate and protect this unique and special place. Before visiting the site teachers should review and discuss the following information with the students.

ENVIRONMENTAL AND CULTURAL EDUCATION PROGRAM PREPARATIONS

Prior to your visit to Canaveral National Seashore, we ask that you carefully read over the following information to prepare you and your students for this field trip.

STUDENTS SHOULD WEAR *(For Lagoon/Turtle Mound Program only)*

- **COVERED SHOES. (no sandals or flip-flops) You will not be allowed to participate in the water part of the program if your shoes are unsuitable. The students should be wearing the shoes they are going to get wet when they get off the bus. This will speed things up.**
- **Chaperons will be expected to participate and should also dress appropriately.**
- Shorts and short-sleeve shirts.
- If rain is forecast you may wear rain gear.
- Hats and sunscreen.

STUDENTS SHOULD BRING

- An extra pair of shoes for after the program. (for lagoon program only)
- Water bottle, insect repellent and sunscreen.
- Towel and a set of dry clothes for the ride home. (for lagoon program only)
- Lunch and drink. (no glass please)

RESTROOM FACILITIES

- Water and restrooms:
 - In Apollo Beach they are available after the program at the Visitor Information Center. Do not rinse off in the restrooms. A hose is available behind the visitor information center.
 - In Playalinda Beach the restrooms are located at the Eddy Creek parking lot. There is no running water. So if you want to rinse your feet you may want to bring water to rinse with.

YOU SHOULD

- Have your students complete the pre-tour worksheet and the post-test after your visit.
- We encourage you to send back the evaluation sheet. Your feedback and suggestions will help make these programs better for everyone.
- Share the information packet and worksheets with all participating classes.

PLEASE REMEMBER

- Emphasize to the students that all plants and animals in the park are protected. The dunes are fragile and are protected from foot traffic.
- Only seashells with no inhabitants may be taken from the seashore.

THIS IS YOUR NATIONAL PARK!



TAKE PRIDE IN KEEPING IT LITTER FREE!

EDUCATIONAL FEE WAIVER CRITERIA

All educational groups seeking fee waivers are required to provide documentation of their official recognition as an educational institution by a Federal, State or local government entity. An applicant who has been granted an educational tax exemption by the Internal Revenue Service or similar state tax authority, qualifies as a bona fide educational institution for the purpose of a fee waiver. Non-school groups or organizations officially recognized by a school or scientific institution for the purpose of providing educational credit hours based on a specific course of instructions also qualify for a fee waiver when official documentation attesting to the official recognition or affiliation is provided. [NPS-22, Ch.3]

WITHOUT THIS FEE WAIVER YOUR SCHOOL WILL BE EXPECTED TO PAY THE FULL ENTRANCE FEE. PLEASE FOLLOW THE INSTRUCTIONS AND REQUEST YOUR WAIVER IN A TIMELY MANNER. ALLOW TWO WEEKS FOR THIS PROCESS.

SAMPLE FEE WAIVER REQUEST LETTER

(SCHOOL LETTERHEAD)

Date

Laura Henning
212 S. Washington Ave.
Titusville, FL 32796

Dear Chief of Interpretation:

We request our classes be exempt from paying the daily use fee into Canaveral National Seashore, for the purpose of attending your Environmental and Cultural Education Program. The classes will be attending programs on: List all dates and location (Apollo or Playalinda).

The Environmental and Cultural Education Program will support our curriculum as we study the beach, barrier island, lagoon systems and Florida history.

Sincerely,

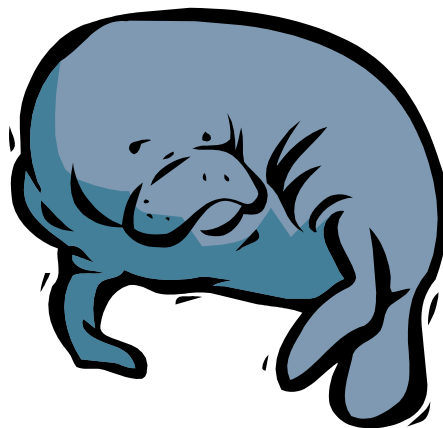
Principal or Teacher

FEDERALLY LISTED ENDANGERED AND THREATENED WILDLIFE FOUND IN CANAVERAL NATIONAL SEASHORE

There are fifteen threatened and endangered species of wildlife that seasonally or permanently reside within the boundary of Canaveral National Seashore.

FEDERALLY LISTED ENDANGERED SPECIES

1. Green sea turtle- 40 to 500 nests are recorded within the seashore annually.
2. Kemp's Ridley sea turtle- swim and feed in offshore waters.
3. Leatherback sea turtle- 7 to 11 nests are recorded within the seashore annually.
4. Atlantic Right Whale- cows and calves migrate past the shore of Canaveral in the early spring.
5. West Indian Manatee- manatees and their calf spend the spring, summer and fall in Mosquito Lagoon.
6. Wood Stork- families of storks may be seen fishing in Mosquito Lagoon.



FEDERALLY LISTED THREATENED SPECIES

7. Southern Bald Eagle- nest and fish in the park.
8. Atlantic Salt Marsh snake- lives in the lagoon feeding on small fish.
9. Eastern Indigo snake- lives in the dunes and feeds on rodents and insects.
10. Florida Scrub Jay- lives in the South district of the seashore.
11. Hawksbill sea turtle- swims and feeds in offshore waters.
12. Loggerhead sea turtle- Around 4000 nests are recorded within the seashore annually.
13. Peregrine Falcon- a migratory resident.
14. Southeastern Beach mouse- Canaveral is the last place to have recorded sightings of this animal.
15. Crested Cara Cara- recently found at Seminole Rest



HELPFUL CHECKLIST



1. Programs are scheduled for the months of September, October and November then again in March, April and May.
2. You must send a fee waiver, on school letterhead, to the superintendent of Canaveral National Seashore, at least two weeks, before your field trip.
3. Group size is limited to 60 students for Apollo Beach. If there are more than 2 classes, additional days may be scheduled.

Group size for Playalinda is limited to 30-40 students, roughly two small classes or one class per day. If there are more students more than one day may be scheduled.

4. Students are asked to be in the park no later than 10:00 a.m. Programs last 2 hours. If you are late this will take away from your program time because we will still end at 12:00 p.m.
5. Arrive ready to go in the water. (shoes, clothes, sunscreen etc.) (for lagoon program only)
6. Please advise of cancellation as soon as possible so we may book another group.
7. Call if you are going to be late. (386)428-3384 ext 0 or ext 240, Michell Woulard for Apollo or (321)403-9334, Ashley Steele for Playalinda.
8. Lightening or other extreme weather will cause the program to be cancelled.
9. All food must remain on the bus until after the program.
10. The bus must be parked and shut off for the duration of the program.

VOCABULARY LIST

LAGOON EXPERIENCE

Brackish water- a mixture of salt and fresh waters

Detritus- bits of animal and plant matter broken down by bacteria; this forms the base of the lagoon's food chain

Estuary- the part of a wide lower course of a river where it's current meets and mixes with the salt water of the ocean and is influenced by the tides; Mosquito Lagoon is an estuary.

Food Chain- the process by which animals and plants feed on lower groups of animals and plants; Green plants form the base of most food chains.

Habitat- the area where an organism is supplied with food, shelter, water and space

Lagoon- body of water separated from the ocean by a barrier island. Lagoons are typically very shallow with some tidal flow

TURTLE MOUND PROGRAM(Apollo Beach only)

Archaeologist- a scientist that studies historic areas such as Turtle Mound

Artifact- a man-made object of historic interest; usually a tool or weapon

Mound- a man-made elevation with a specific purpose, i.e. burial mound, ceremonial mound

Midden- a mound made from discarded shells from the processing of edible shellfish

Timucuan- a group of Native Americans that occupied Central Florida and Southern Georgia prior to Ponce de Leon's arrival in Florida

ANIMALS AND DUNES PROGRAMS

Barrier Island- a long, narrow slip of land that protects the mainland from the ocean; It is separated from the mainland by the lagoon.

Face of the Dune- the part of the dune that faces the ocean

Inlet- a narrow channel leading from inland waters to the ocean; Ponce Inlet connects the Mosquito Lagoon to the Atlantic Ocean.

Marine Debris- any objects found floating that does not naturally occur

Sand Dune- an elevated ridge of sand deposited by wind and ocean

Scrub Zone- the back part of the dune covered by saw palmetto and other vegetation

Carnivore- an animal whose primary source of food is animal flesh

Herbivore- an animal whose primary source of food is plant material

Omnivore- an animal that eats both plants and animals and can use either of these primary food sources

MOSQUITO LAGOON PRE-TEST

1. What is an estuary?
2. Is this water fresh or salt water?
3. Give a reason that Canaveral was designated as a national park.
4. What is Turtle Mound made of?
5. Name three National Parks, besides Canaveral.
 - 1.
 - 2.
 - 3.
6. Where will you find mangrove trees?
7. Who owns National Parks?

OCEAN/DUNES PRE/TEST

1. What is a barrier island?
2. What animal lays its eggs on the beach in the summer?
3. What are sand dunes?
4. Name three National Parks, besides Canaveral.
 - 1.
 - 2.
 - 3.
5. Who owns National Parks?
6. Name two ocean dwelling creatures.
 - 1.
 - 2.
7. Give a reason that Canaveral was designated as a national seashore.

MOSQUITO LAGOON POST TEST

1. What is the importance of an estuary?
2. Name three species that were collected during seining.
 - 1.
 - 2.
 - 3.
3. Name two mammals that live in the seashore
 - 1.
 - 2.
4. Why are mangroves important to this eco-system?
5. Who owns Canaveral National Seashore?
6. What was your favorite thing about the program?
7. What was your least favorite thing about the program?

ANIMALS/DUNES POST TEST

1. Name the three turtles that nest at Canaveral.
 - 1.
 - 2.
 - 3.
2. Name one creature that you saw.
3. Why are sand dunes so important?
4. Who owns Canaveral National Seashore?
5. Name one plant that grows on the dunes.
6. What was your favorite animal and why did you like it so much?
7. What was your favorite thing about the program?
8. What was your least favorite thing about the program?

TEACHER EVALUATION OF ENVIRONMENTAL AND CULTURAL EDUCATION PROGRAM

Please return to: Canaveral National Seashore
Laura Henning, Interpretive Park Ranger
7611 S. Atlantic Ave.,
New Smyrna Beach, FL 32169

1. Was the teacher's guide sufficient instruction before your visit?
2. Did your program start and end on time?
3. Were the ranger and volunteers knowledgeable about the resources that were covered in the program?
4. Were the various safety issues addressed at the beginning of the program?
5. Any suggestions to improve this program for the future.
6. Would you recommend this program to other teachers, if not why?

On behalf of the Staff and volunteers of Canaveral National Seashore we would like to thank you for your preparation and participation in our Environmental and Cultural Education Programs for the school year 2015/2016.

We know that only through the education of our youth will we be able to make a difference. Canaveral National Seashore will continue to protect and preserve as long as there are caring individuals, such as all of you.

Thank You,

Laura Henning
Chief of Interpretation & Visitor Use